

## **MISSION OF FWP**

Montana Fish, Wildlife & Parks, through its employees and citizen commission, provides for the stewardship of the fish, wildlife, parks and recreational resources of Montana, while contributing to the quality of life for present and future generations.

### **Guiding Principles**

We understand that serving the people of Montana to achieve this vision is both a privilege and a responsibility. We also understand that we cannot achieve our vision alone. The following principles will guide FWP as we begin our second century:

- We will maintain the long-term viability of Montana's natural, cultural and recreational resources.
- We will actively involve people in decisions that affect them; help people to participate by providing them with credible and objective information, and develop programs with a clear understanding of public expectations for FWP service.
- We will serve as an advocate for responsible management and for equitable allocation of public use of the limited resources that we are entrusted to manage.
- We will manage fish and wildlife resources with pride in Montana's hunting and angling heritage.
- We will create and strengthen working partnerships with individuals, organized groups and other natural, historic and cultural resource management agencies.
- We will use innovation and technology to improve our services.

### **Goals Relevant to Elk Management Plan**

- 1) FWP will complete strategic and six-year plans for fish, wildlife and parks programs to clarify public expectations, allocate resources and define a common direction for FWP and our partners.
- 2) FWP management decisions will equitably balance the interests of hunters, anglers and other outdoor recreationists, visitors to historic sites, landowners, the general public and the needs of Montana's fish, wildlife and parks resources.
- 3) FWP will manage its wildlife program to balance game damage, human/wildlife conflicts and land-owner/recreations conflicts with the perpetuation and protection of wildlife populations.
- 4) FWP management decisions recognize that Montana's agricultural community is integral to the management of Montana's fish and wildlife populations and the habitats that support them.
- 5) FWP will provide diverse and equitable opportunities for people to experience a variety of outdoor recreation and historic and cultural experiences on public lands and in cooperation with private landowners.
- 6) FWP programs will be consistent with ecologically sound and sustainable practices and managed within funding capabilities.

- 7) FWP will provide and support programs to conserve and enhance Montana's terrestrial ecosystems and the diversity of species inhabiting them.
- 8) FWP will help Montana citizens to understand and participate in FWP's decision-making processes.
- 9) FWP will provide regulations, program information and educational materials that are accurate, reliable and easy for people to use and understand.
- 10) FWP will help people to be aware of and appreciate Montana's fish, wildlife, cultural, historic and natural resources.
- 11) FWP will provide family-oriented educational opportunities to help all ages learn to participate in and enjoy Montana's many and varied outdoor recreation opportunities.
- 12) FWP will encourage high standards of outdoor behavior by recreationists who participate in FWP regulated activities.

## **STATEWIDE OBJECTIVES**

The most specific objectives are presented in 44 individual Elk Management Unit (EMU) Plans that follow. Specific statewide objective numbers for elk counted, hunters, and days of recreation are not presented because they do not contribute to problem solving. For example, half of the EMUs might total 10,000 elk counted above objective and the other half, 10,000 below objective. The net result would be that we were at statewide objectives for numbers of elk counted, when in fact; elk management problems existed in all EMUs.

### **Statewide Elk Population Management Objective**

Maintain elk population numbers at levels producing a healthy and productive condition of elk, vegetation, soil, and water and that also reduces elk conflicts on private and public lands.

### **Statewide Elk Habitat Objective**

Promote conservation and improvement of habitats that support the state's elk populations.

### **Statewide Elk Recreation Objective**

Provide for a diverse elk hunting opportunity within, as much as possible, a 5-week general season and a 5 to 6-week archery season. Further, provide for quality viewing experiences and general enjoyment of elk by the public.

### **Statewide Access Objective**

Maintain or improve public hunting access such that hunting is an effective population management tool that will maintain elk populations below levels causing damage to their habitat (vegetation, soil, and water) or excessive economic harm to the landowners that

allow public hunting. Enhancing existing access programs and developing Community Working Groups will be a priority for FWP. For areas where elk security problems exist, promote access management that will reduce excessive harvests or movements of elk from public to private lands.

### **Statewide Game Damage Objective**

Manage elk populations at levels commensurate with other land uses and, to the extent possible, prevent game damage from occurring. Where damage to standing or stored agricultural crops has occurred, implement timely and effective actions to provide relief to landowners meeting qualifications outlined in FWP's game damage policy.

### **Statewide Population Monitoring Objective**

Enhance elk population monitoring to provide more accuracy and reliability in detecting population changes that require an adaptive regulation change to maintain population objectives.

## **SUMMARY OF MAJOR CHANGES FROM 1992 ELK PLAN**

The biggest change of this revision of the Elk Plan from the 1992 Plan is the proposal to use Adaptive Harvest Management (AHM). The principles of AHM were discussed in the Introduction to the Elk Plan. Essentially, AHM consists of: 1) objectives for numbers of elk counted and numbers/ratios/percentages of bulls in the populations, 2) a strong monitoring program (post-season aerial surveys) to measure total numbers of elk and bulls counted and calf:100 cow ratios, and 3) sets of hunting regulation alternatives to implement when elk are at (Standard), above (Liberal), or below (Restrictive) objectives. Monitoring will follow the results of implementation of regulation alternatives to determine if objectives are achieved. If monitoring indicates that regulation packages do not achieve objectives, the AHM process will require design and implementation of new regulation packages. The Plan will evolve as learning from the AHM process occurs. Objectives can also change as learning occurs. At this stage of implementation, the AHM process for elk management assumes only the additive mortality/non-density dependent reproduction model.

There are 44 Elk Management Units (EMUs) in this revised Elk Plan compared to 35 in the 1992 Plan. The Teton River, Birdtail Hills, and Custer Forest EMUs were new EMUs added between 1992 and 2001. During the preparation of drafts of this plan, some previous EMUs were split, some were combined, and new EMUs were created. In this Plan, all hunting districts in Montana are now within an EMU. This includes hunting districts in central and eastern Montana where few or no elk are present and few are desired because of agricultural conflicts. Thus some new EMUs plan for the prevention of establishment of large elk populations in these areas.

## **Process for Changing Population Objectives and Regulation Packages**

As the AHM process evolves and we gain additional information from this process, there may be a need to change Population Objectives and Regulation Packages. Similarly, catastrophic events that create significant habitat changes, reasonable recommendations from Community Working Groups, and changes in landownership might also affect elk populations, objectives, and regulations. The public has been concerned about how and when such changes might be possible.

We suggest that internal or external proposed changes resulting from factors/events such as described above be submitted to FWP Wildlife Division by 15 July. Any proposals submitted would be reviewed internally, and if determined to be appropriate, have merit, or wide public support, would be forwarded to the FWP Commission for their consideration at the August Commission meeting to adopt as tentative proposals for public comment. The Commission would take final action at the September Commission meeting on these proposals. Changes to objectives and/or regulation packages would then be in place to guide Commission action during the general season setting process in December and February of each year.

## **Population Objectives**

Objectives for elk numbers in the 1992 Plan were a mixture of inconsistently estimated total numbers and actual counted numbers. Further, there is no record of how population estimates were derived for those areas where objectives were for estimated populations. For the majority of EMUs in 1992, objectives were for actual counted numbers, not estimated total populations. For this Plan, all objective numbers are for counted numbers without expansion to estimations.

Objective numbers are presented as a point estimate, but usually with a range around the point. This range may be expressed as a fixed range or as a percentage variation from the point objective (usually 20%). The major reason for this range is that counting elk is an inexact science and counting conditions vary from year-to-year and a range is necessary to take this variation into account and determine whether a real change has occurred. Therefore, we also generally use a 2-year period to make changes if counts are below objectives because of the possibility of poor survey conditions. However, because seldom, if ever, do we count more elk than actually exist, we will recommend regulation changes immediately when the number of elk counted are above the objective range.

## **Population Monitoring**

One new elk population survey area is proposed for the Salish EMU should funding become available. The Bridger and Missouri River Breaks EMUs will begin coordinating surveys such that non-annual surveys are conducted in the same year throughout the EMUs. Related to Wolf-Ungulate studies, increased elk population surveys will be conducted in the Gallatin/Madison, Elkhorn, and Garnet EMUs. Additionally, for HDs 360 and 362 within the Gallatin/Madison EMU, the normal fixed-wing survey will be

accomplished by helicopter every other year. A potential increase in survey frequency is proposed for the Bull Mountain EMU and we will investigate establishment of a reliable, cost-effective survey area for the Custer Forest EMU.

Additional enhancement of elk population monitoring will depend on increased funding, availability of pilots, and work time of biologists. Should these factors be positive, we propose additional enhancements prioritized as follows:

- 1) Areas with high survey/population variability, consistent problems (over/under objective, damage complaints, etc.), of major importance (high hunter harvest, high viewer interest), or those with no current surveys would have high priority.
- 2) Areas that are only surveyed every 2-3 years should be upgraded to every year.
- 3) Studies should be established that would estimate the average and range of observability for aerial elk surveys in cover types/habitats for which that information is currently unavailable.
- 4) Census areas with repetitive surveys, similar to those for mule deer, should be established for representative, important elk populations.
- 5) Should the above be accomplished, modeling of elk populations should begin, with testing of competing models of dynamics tested relative to affects of Regulation Packages.
- 6) Locations of elk observed during surveys should be recorded by use of GPS units and a track route of the survey should also be recorded for comparison of intensity of survey among years.

## **Regulation Packages**

The reader should look to the individual EMU Plans for the proposed regulation packages that apply there. Below, however, is a very general summary of proposed regulation packages. For bulls, the Standard package is generally limited permits in 9 EMUs and a portion of another. The Standard package is antlered bull (AB) in 16 EMUs or portions of EMUs and brow-tined bull (BTB) in 22 EMUs or portions of EMUs. The Standard regulation is spike bull with BTB on permits in one EMU and a portion of another EMU. For the Restrictive package, unlimited or limited permits is the option in 31 EMUs where BTB regulations now occur. Where AB regulations now occur, the first restrictive option will be BTB regulations. There is generally no Liberal regulation package for bulls except in several EMUs where much of the game damage problem is caused by bulls. We believe that in most cases, if “too many bulls” becomes a problem in most areas, the temporary shift of hunting pressure that would occur would make it unnecessary to liberalize regulations. For antlerless elk, the Standard regulation is generally limited permits in 22 EMUs, a general antlerless regulation of varying length with limited permits for the remainder of the season in 19 EMUs, and either-sex regulations in 2 EMUs. Eighteen of the EMUs also have the option of issuing A-9/B-12 licenses (B-tags) within the Standard regulation. For some EMUs, issuing A-7 licenses remains an option. For the Restrictive package, generally all EMUs propose implementing limited antlerless permits. For the Liberal package, 37 (nearly all) EMUs have a general antlerless regulation of some length, up to the full 5-weeks of the general season. Within the

Liberal package, 27 EMUs contain the option for issuing A-9/B-12 licenses (B-tags) and 16 EMUs contain an option for an Antlerless Only regulation if objectives are not met with all other Liberal options.

If it becomes necessary to recommend a Restrictive Regulation for bulls that includes unlimited or limited permits, ALL hunters, including archers will be required to apply for the permits in most cases. Similarly, if antlerless ONLY regulations are implemented, archers will also be limited to antlerless ONLY hunting.

Although FWP intends to manage elk within the framework of a 5-week general season, where game damage criteria apply, all EMUs have the option of special early seasons, an extended general season, or special late seasons. However, seasons outside the 5-week general season framework are not intended to be solutions where outfitting, other paid hunting, or land totally closed to hunters or with severely restricted access compromises general public access during the general 5-week season.

It is the intention of FWP, as part of the hunter recruitment program, to maintain Special Youth Hunts in all hunting districts where general bull hunting (areas without limited permits ONLY for bulls) occurs. These Special Youth Hunts, for youths 12-14 years of age, allow the harvest of antlerless elk (without a special permit) or a legally defined bull for that HD. This Special Youth Hunt is not written into the AHM regulation packages of individual EMUs, but will apply wherever criteria are met.

### **Elk Management Unit (EMU) Location and Summary Statistics**

Figure 20 indicates locations of EMUs and Table 9 displays summary statistics for EMUs. Further indication of location of EMUs is provided in a map at the beginning of each EMU Plan.

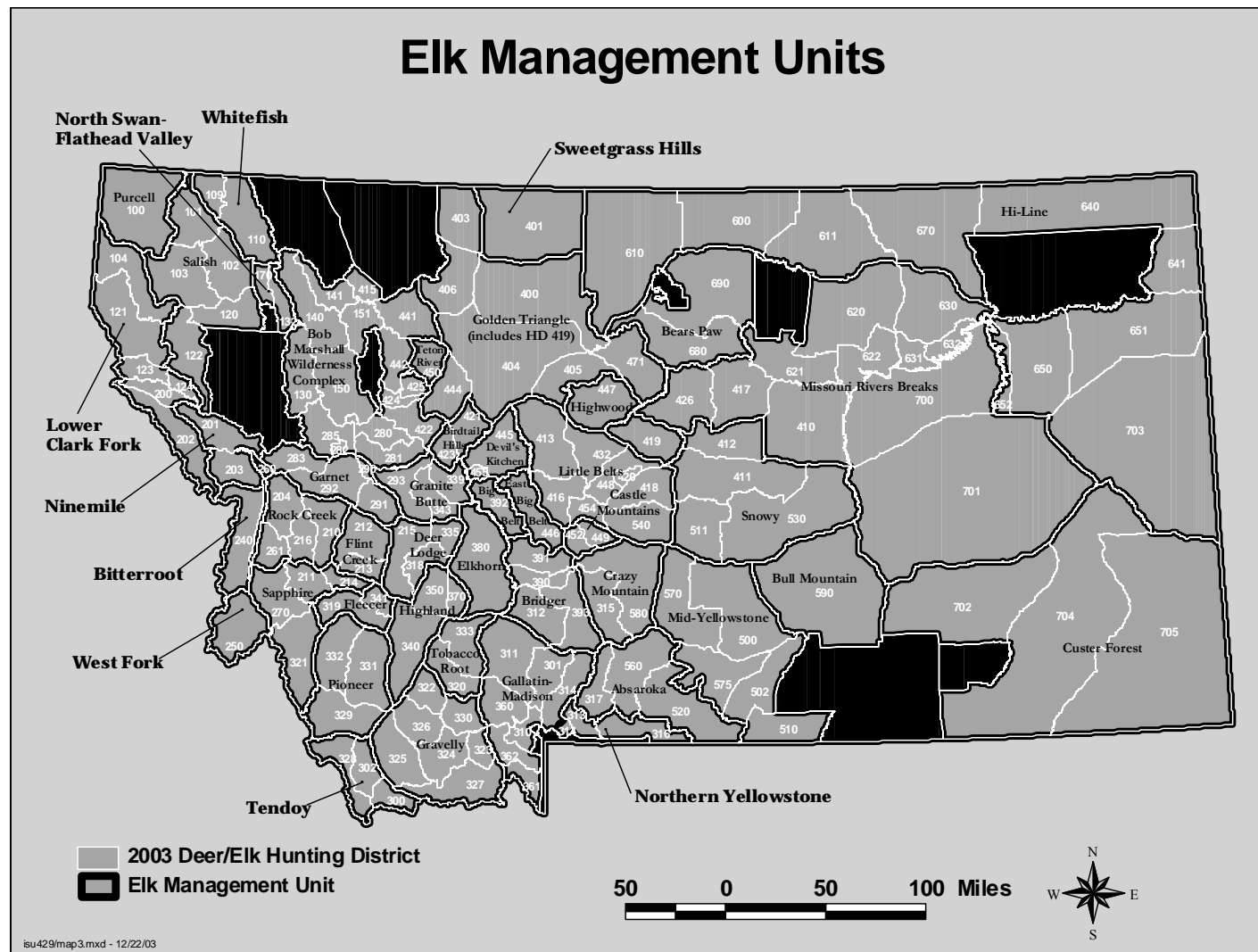


Figure 20. Location and names of Montana Elk Management Units (EMUs).

Table 9. Summary statistics for number of elk counted, objective number, elk unavailable for general season management, hunter numbers, and average annual elk harvest by Elk Management Unit (EMU).

Name of EMU	Area (mi <sup>2</sup> )	Number of Elk Counted <sup>a</sup>		Estimated No. of Elk not available for general public hunting <sup>c</sup>	Ave. Hunter Numbers (1999-2001) <sup>d</sup>	Average Elk (1999-2001) <sup>d</sup>		Harvest
		Current	Objective <sup>b</sup>			Bulls	Antlerless	
Purcell <sup>e</sup>	1,414	120	300	0	2,115	64	17	
Salish <sup>e</sup>	3,350	466	700	0	8,000	141	49	
Whitefish <sup>e</sup>	1,067	358	600	0	1,040	50	16	
North Swan-Flathead Valley <sup>e</sup>	410	250		100	420	11	8	
Lower Clark Fork <sup>f</sup>	2,896	2,829	2,400	70	6,700	295	205	
Bob Marshall Complex <sup>g</sup>	6,280	7,112	5,925	1,330	8,006	531	222	
Ninemile	1,055	1,551	1,550	145	2,193	83	51	
Bitterroot	927	1,016	750	305	1,738	58	83	
Garnet	1,349	3,279	2,200	1,530	3,951	348	198	
Flint Creek	772	1,384	1,500	495	2,723	216	268	
Rock Creek	1,490	3,044	2,500	1,060	4,747	314	352	
Sapphire	1,985	3,745	3,400	1,090	6,472	550	417	
West Fork	707	1,703	1,400	340	1,519	84	46	
Deer Lodge	1,086	1,749	2,100	485	3,655	243	360	
Granite Butte	1,113	2,232	2,100	780	3,731	220	275	
Fleecer	630	1,747	1,475	50	2,694	181	234	
Pioneer	2,040	2,575	2,950	445	6,537	682	633	
Tendoy	1,028	2,641	2,050	500	3,200	388	366	
Gravelly	3,044	9,050	6,500	2,135	11,825	990	1,543	
Tobacco Root	955	1,343	1,000	780	2,365	183	243	
Highland	1,385	921	1,600	500	3,450	247	228	
Elkhorn	1,241	1,787	2,000	180	3,574	263	302	
West Big Belt	444	1,183	1,100	175	1,870	119	140	
Bridger	1,826	5,591	3,550	3,760	4,100	451	478	
Gallatin/Madison	3,006	11,121	11,200	7,745	11,279	941	719	
Northern Yellowstone <sup>h</sup>	700	3273 <sup>h</sup>	4000 <sup>h</sup>	325	3,200	275	1,125	
Absaroka	2,420	2,817	2,650	1,455	2,558	266	200	
Crazy Mountains	1,708	3,043	1,975	1,965	2,158	267	266	

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Table 9 (continued) Summary statistics for number of elk counted, objective number, elk unavailable for general season management, hunter numbers, and average annual elk harvest by Elk Management Unit (EMU).

Name of EMU	Area (mi <sup>2</sup> )	Number of Elk Counted <sup>a</sup>		Estimated No. of Elk not available for general public hunting <sup>c</sup>	Ave. Hunter Numbers (1999-2001) <sup>d</sup>	Average Elk (1999-2001) <sup>d</sup>		Harvest
		Current	Objective <sup>b</sup>			Bulls	Antlerless	
East Big Belt	609	1,177	900	900	1,228	124		198
Castle Mountains	341	636	625	320	600	89		89
Little Belt	3,585	3,040	3,600	1,370	8,516	517		483
Devil's Kitchen	751	1,237	2,200	370	1,702	130		242
Birdtail Hills	542	848	500	510	644	62		56
Teton River	318	94	85	30	464	10		10
Sweetgrass Hills	1,891	343	350	120	366	29		113
Golden Triangle <sup>i</sup>	7,964		few	0	391	20		8
Highwood	748	510	550	230	958	69		32
Snowy	4,705	1,900	1,100	475	947	101		122
Mid-Yellowstone	4,665	273	445	200	630	27		64
Bull Mountain	2,877	1,331	1,050	730	507	66		118
Bears Paw Mountains	2,821	259	250	40	100	25		23
Missouri River Breaks	17,239	7,553	4,725	1,280	4,600	507		647
Hi-Line <sup>i</sup>	21,104	100	few	50	82	11		2
Custer Forest <sup>j</sup>	14,378	900	500	360	757	58		97
<b>TOTAL</b>	<b>130,866</b>	<b>98,131</b>	<b>86,355</b>	<b>34,730</b>	<b>138,312</b>	<b>10,306</b>		<b>11,348</b>

<sup>a</sup> Total counts NOT attempted for all EMUs - see individual EMU superscripts. Count data generally for 2004 - 2002/2003 if no flights in 2004.

<sup>b</sup> Midpoint used if Objective is a range in numbers.

<sup>c</sup> Number of elk estimated not available for general public hunting during 5-week general season due to no hunting allowed, outfitting, leasing, blocked access, or other factors. Some of these elk are available to outfitted clients, family, and friends.

<sup>d</sup> Hunter numbers and harvest averaged for 1999-2001 except for some new EMUs where 2002 data are used.

<sup>e</sup> Complete counts NOT attempted because of heavy timber cover and scattered winter range - numbers represent counts of small sample areas.

<sup>f</sup> Portions of EMU counts are small sample areas only.

<sup>g</sup>Region 1 portion of counts are small sample areas only.

<sup>h</sup> Numbers for elk wintering north of Yellowstone National Park ONLY.

<sup>i</sup> No population counts attempted - ground observations and public reports only.

<sup>j</sup> Because of costs of surveying widely scattered elk, total counts have not been attempted. Estimates based on general observations.